

CLAIMS

1. Liquid compositions intended for the preparation of sustained release capsules, wherein the sustained release of the active substance is obtained by the in situ formation of a matrix, which, being more or less compact and biodegradable, is obtained by means of an instantaneous and physical modification of the content of the capsule at the contact of digestive secretions as soon as it is opened, leading to a release during a time frame exceeding one hour of the active substance, which has been previously dissolved or dispersed by means of solvents, such release being modulable by incorporating appropriate additives.
2. Liquid compositions according to claim 1, wherein the active substance is in the liquid state or in the solid state.
3. Liquid compositions according to claim 1, wherein the instantaneous physical modification of the content of the capsule is obtained from inverted latexes and/or lipophilic hydrocolloidal solutions.
4. Liquid compositions according to claim 1, wherein the instantaneous physical modification of the content of the capsule is obtained by means of a gelification and/or by the formation of a porous lattice at the contact of digestive secretions.
5. Liquid compositions according to claim 1, wherein the instantaneous physical modification of the content of the capsule occurs between 1 second and 10 minutes after the opening of the capsule.
6. Liquid compositions according to claim 1, wherein the release kinetics of the active substance is modulated by the introduction or not of hydrophilic plasticizers, of tensioactives, of dissolution accelerators, of buffer systems, or of the association of the five.
7. Liquid compositions according to claim 1, wherein the release kinetics of the active substance from the matrix is a function or not of the pH.
8. Liquid compositions according to claim 1, wherein the release kinetics of the active substance from the matrix is a function of the digestive enzymes.
9. Liquid compositions according to claim 1, wherein their viscosity is comprised between 50 millipascals and 500,000 millipascals.
10. Liquid compositions according to claim 1, wherein the active substance is dissolved or dispersed into oils or organic solvents of lipophilic, hydrophilic or hydrophilic nature.
11. Liquid compositions according to claim 1, wherein the release of the active substance from such matrices varies from one hour to twenty-four hours.
12. Liquid compositions according to claim 1, wherein they are conditioned in a hard or soft capsule.
13. Liquid compositions according to claim 1, wherein the composition of the tunic of the capsule is constituted of gelatine or starches or hydroxypropylmethylcelluloses or carraghenanes or of polymers of polyvinyl alcohol.
14. Liquid compositions according to claim 1, wherein the abovementioned active substance belongs to all therapeutic classes.

15. Liquid compositions according to claim 2, wherein the active substance in the liquid state is incorporated under the form of a solution, an emulsion or an auto-dispersible micro-emulsion.
16. Liquid compositions according to claim 2, wherein the active substance in the solid state is dispersed under the form of a powder, which may be coated or not, or under the form of absorbats of known title.
17. Liquid compositions according to claim 2, wherein the active substance dispersed in the solid state shows a granulometry comprised between 1 μm and 1000 μm .
18. Liquid compositions according to claim 3, wherein the abovementioned lipophilic hydrocolloids solutions are constituted of synthetic polymers and/or natural derivatives.
19. Liquid compositions according to claim 3, wherein the inverted latexes are constituted of derivatives of acrylic acid or of acrylamide polymers.
20. Liquid compositions according to claim 3, wherein the concentration of inverted latex represents 0.1 % to 100 % of the total mass of the excipients.
21. Liquid compositions according to claim 3, wherein the proportion of lipophilic hydrocolloids solution in the inverted latex may vary from 0 to 90 % in mass with respect to the total mass of the inverted latex.
22. Liquid compositions according to claim 6, wherein the abovementioned hydrophilic additives belong to the class of celluloses and their derivatives, of starches and their derivatives, of polysaccharides such as guar, xanthan, tragacanth, and acacia gums, carob, pectins, alginates, carraghenanes, gellan gums, chitosan, polymers of vinylpyrrolidone.
23. Liquid compositions according to claim 6, wherein the concentration of hydrophilic additives is comprised between 0 % and 80 % in weight with respect to the total mass of the excipients.
24. Liquid compositions according to claim 6, wherein the granulometry of the hydrophilic additives must be comprised between 1 μm and 1000 μm .
25. Liquid compositions according to claim 6, wherein the plasticizers are constituted of triacetin, dibutyl phthalate, diethyl phthalate, dibutyl sebacate and saccharose isobutyrate acetate.
26. Liquid compositions according to claim 6, wherein the concentration in plasticizer is comprised between 0 % and 80 % in weight with respect to the total mass of the excipients.
27. Liquid compositions according to claim 6, wherein the abovementioned tensioactive agents belong to the class of ionic, non ionic and amphoteric tensioactives.
28. Liquid compositions according to claim 6, wherein the concentration of tensioactives is comprised between 0 % and 50 % in mass with respect to the total mass of the excipients.
29. Liquid compositions according to claim 6, wherein the abovementioned dissolution accelerators are constituted of lactose or polyols, including sorbitol, maltitol, xylitol, maltodextrines, maltisorb, manitol or carbonates and the mono and dibasic phosphates.
30. Liquid compositions according to claim 6, wherein the concentration of dissolution accelerators is comprised between 0 % and 50 % in weight with respect to the total mass of the excipients.

31. Liquid compositions according to claim 6, wherein the abovementioned buffer systems are constituted of hydrochloric, phthalic, boric, citric, phosphoric, acetic, lactic, propionic acids and the corresponding salts and the sodium, calcium and potassium hydroxides.

32. Liquid compositions according to claim 6, wherein the concentration of buffer systems is comprised between 0 % and 50 % in mass with respect to the total mass of the excipients.

33. Liquid compositions according to claim 18, wherein the abovementioned natural derivatives are derivatives of cellulose, starch, saccharose, polyesters of lactic acid, glycolic acid or of the association of these two polyesters.

34. Liquid compositions according to claim 18, wherein the abovementioned synthetic polymers are copolymers of metacrylic acid, copolymers of acrylic acid, acrylamides, polymers and copolymers of polyethylene oxide, polyamides, polyacrylnitriles, polymers of polyvinylpyrrolidone.

35. Liquid compositions according to claim 18, wherein the concentration of solid matter in the lipophilic hydrocolloide solutions is comprised between 0.1 % and 90 % in mass with respect to the volume of the lipophilic hydrocolloide solution.

36. Liquid compositions according to claim 18, wherein the liquid phase of the lipophilic hydrocolloide solutions are vegetable oils, mineral oils, natural oils, synthetic oils, classical and non toxic lipophilic, hydrophilic and hydrolipophilic solvents, used for the manufacturing of pharmaceutical forms.

37. Liquid compositions according to claim 33, wherein the abovementioned derivatives of cellulose are acetophthalate, hydroxypropyl, ethyl, ethylhydroxyethyl, hydroxypropylmethyl phthalate, propionate acetate, butyrate acetate.

38. Liquid compositions according to claim 33, wherein the abovementioned derivatives of starch are modified starches obtained by means of esterification or etherification.

39. Liquid compositions according to claim 33, wherein the abovementioned derivatives of saccharose are fatty acid esters.

40. Manufacturing method of liquid compositions according to any one of claims 1 to 39, wherein the different components of said liquid compositions are mixed with or without heat and are followed by a conditioning in soft capsules or in hard capsules.